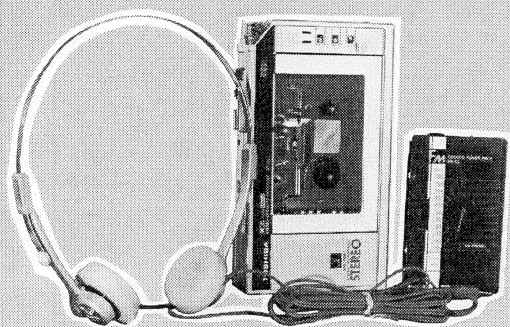


TOSHIBA

STEREO CASSETTE RECORDER

KT-R2



SPECIFICATIONS

— Tape Section —

Track system: Stereophonic
Recording system: AC bias
Erasure system: Magnet erasure
Recommended tape: Normal ferric, chrome dioxide, and metal alloy: C-30 to C-120 (chrome dioxide and metal alloy tapes for playback only)

Tape speed: 4.8 cm/sec.

Tone selector: High/low

Frequency response: Reproduction: Normal 40 — 12 kHz, metal 40 — 14 kHz
Integration: Normal 60 — 10 kHz

Input terminals: Microphone/external input terminal [MIC/AUX] 3.5 x 2
External microphone: Input level 0.5mV

External input: Input level 100mV
Output terminals: Headphone terminals [PHONES] 3.5mm stereo x 2 32 ohm
External speaker terminals [EXT. SPEAKER] 3.5mm stereo 6 — 16 ohm

Maximum output power: Headphone terminals
Integration: 80mW (40mW + 40mW) 32 ohm with load
External speaker terminals
Integration: 400mW (200mW + 200mW) 8 ohm with load

Battery life: When using cassette player: Approx. 4.5 hours (SUM-3 x 4)

When using tuner pack: Approx. 15 hours (AM-3 x 4)
Power supply: 6V DC (SUM-3 "AA" x 4)
External power source supplied to the [DC IN 6V] jack (5.0mm dia. centre contact positive)

Dimensions (W x H x D): 169 x 92 x 37 (mm)
Weight: 530 g (including batteries but not the tuner pack)

— Tuner Section —

Receiving frequency: 88 MHz — 108 MHz

- This FM stereo tuner pack (RP-S2) is designed exclusively for this unit, KT-S2 and KT-S1, and is not usable in other types of cassette recorders.

CONTENTS

1. OPERATING CONTROLS 3

2. DISASSEMBLY INSTRUCTIONS 4 to 5

3. BLOCK DIAGRAM 6

4. ALIGNMENT INSTRUCTIONS 7 to 8

5. ELECTRICAL PARTS LOCATION 9, 11

 5-1 CASSETTE RECORDER SECTION 9

 5-2 FM TUNER PACK SECTION 11

6. SCHEMATIC DIAGRAM 10, 12

 6-1 CASSETTE RECORDER SECTION 10

 6-2 FM TUNER PACK SECTION 12

7. MECHANISM EXPLODED VIEW 13

8. MOTOR REPLACEMENT 14

9. CABINET EXPLODED VIEW 15, 18

 9-1 CASSETTE RECORDER SECTION 15

 9-2 FM TUNER PACK SECTION 19

10. PARTS LIST 16, 17, 18, 20, 23

 10-1 MECHANISM & CASSETTE RECORDER CABINET 16

 10-2 CASSETTE RECORDER 17, 18

 10-3 FM TUNER PACK 20

 10-4 ACCESORIES 23

11. HEADPHONE SECTION 21, 22


 11-1 HEADPHONE EXPLODED VIEW (TA, TC, AY)..... 21

 11-2 HEADPHONE PARTS LIST (TA, TC, AY)..... 21

 11-3 HEADPHONE EXPLODED VIEW (YY, EY, RY, MY)..... 22

 11-4 HEADPHONE PARTS LIST (YY, EY, RY, MY)..... 22

Nameplate (KT-R2)



TOSHIBA
STEREO CASSETTE RECORDER
MODEL NO. KT-R2

POWER SOURCE

DC 6V

SUM-3 ("AA" SIZE CELL) x 4

TOSHIBA CORPORATION MADE IN JAPAN

FTZ

11/632

Name Label (RP-S2)
(TA, TC)



TOSHIBA FM STEREO
TUNER PACK
MODEL NO. RP-S2

USE IN COMBINATION WITH
TOSHIBA STEREO CASSETTE
PLAYER KT-S2

TOSHIBA CORPORATION

FCC ID: AJX9XAM051

TOSHIBA

MADE IN JAPAN

Name Label (RP-S2)
(AY, YY, EY, MY)



TOSHIBA
FM STEREO
TUNER PACK
MODEL NO. RP-S2

USE IN COMBINATION WITH
TOSHIBA STEREO CASSETTE
PLAYER KT-S2

TOSHIBA CORPORATION

MADE IN JAPAN

1. OPERATING CONTROLS

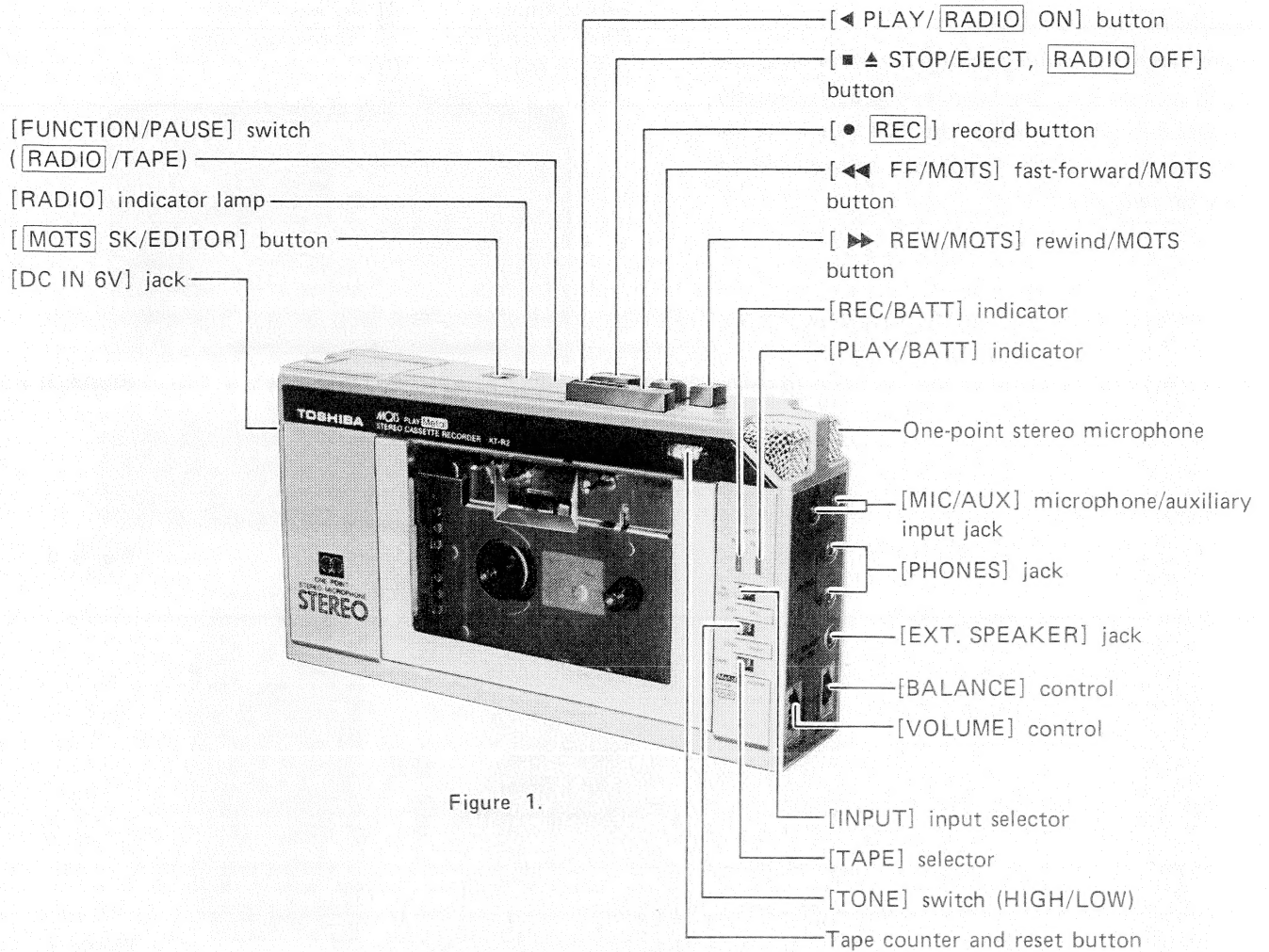


Figure 1.

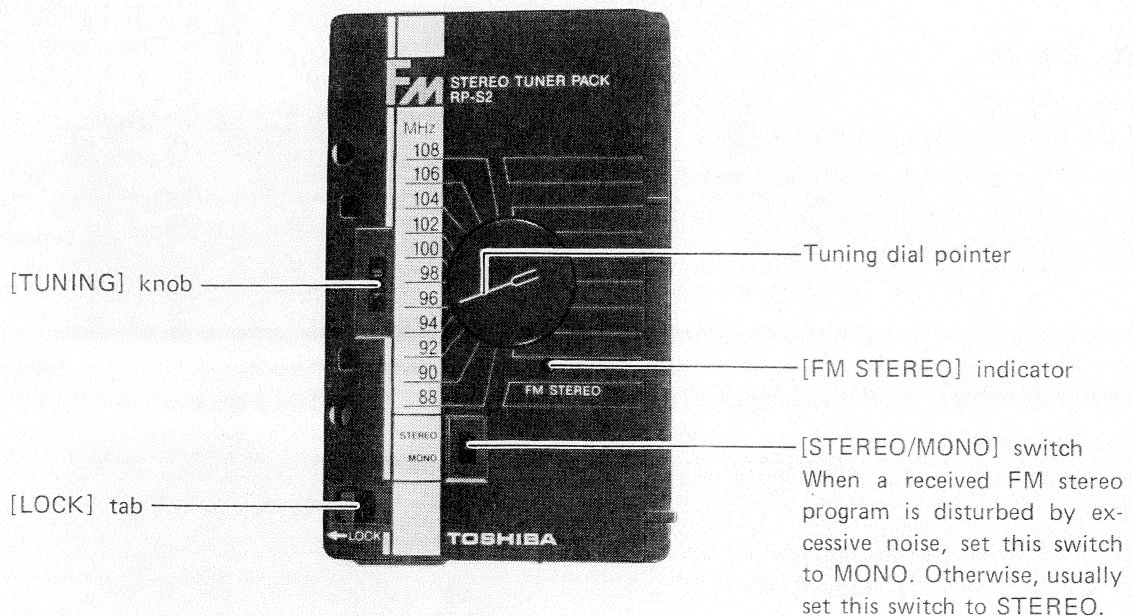


Figure 2.

2. DISASSEMBLY INSTRUCTIONS

CABINET BACK REMOVAL

1. Remove the battery cover.
2. Loosen each set screw (A) and (B) on the reverse side of the back cabinet, two set screws (C) on the bottom side and two set screws (D) on the flank side for union with the front cabinet. The back cabinet will be ready for removing.

PAN Screw
1.4 ϕ x 4mm
Chromium-plated

PAN Screw
1.7 ϕ x 11mm
Chromium-plated

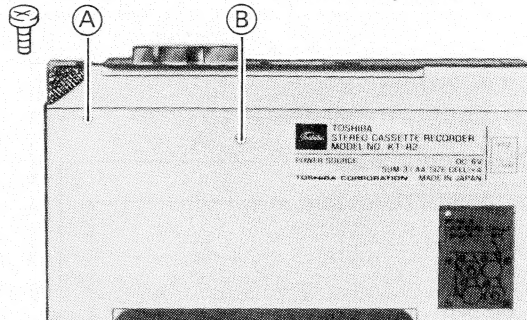


Figure 3.

Battery Cover

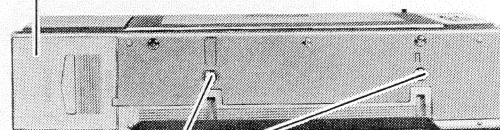


Figure 4.

BID Screw 2 ϕ x 8mm
Chromium-plated

PAN Screw
1.4 ϕ x 3mm
Chromium-plated

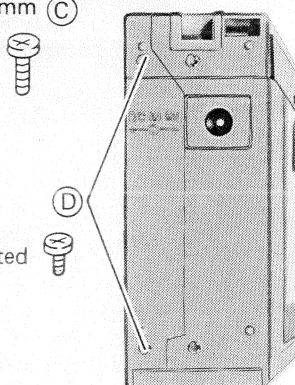


Figure 5.

FRONT PANEL REMOVAL

1. Remove the back cabinet.
2. Loosen and remove one mechanical set screw (E).
3. Loosen and remove one set screw (F) for assembling the microphone and (DC in 6V) jack (G). The front cabinet is now ready for removing.

BID Tapping Screw
2 ϕ x 6mm

BID Tapping Screw, RED
2.6 ϕ x 8mm

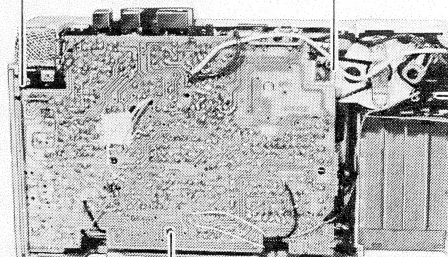


Figure 6.

(DC in 6V)
Jack

FLT Tapping Screw BLK
1.4 ϕ x 3.5mm

PAN Screw
1.4 ϕ x 3mm

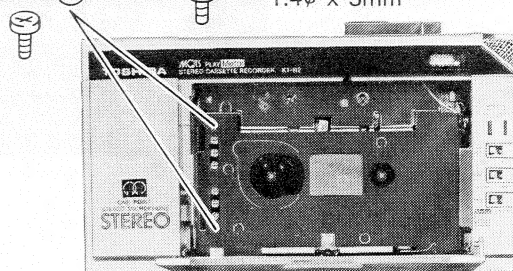


Figure 7.

HOW TO OPEN P.C. BOARD

1. Remove the back cabinet.
2. Remove the PC plate and one set screw (H) for the mechanical body.
3. Open the cassette cover and remove the base for the mechanical body and the set screw (I) for the connector.

REPAIRING FM TUNER PACK

1. Remove six special screws (J) on the bottom side of the tuner pack.
2. Remove the cabinet top of the tuner pack.
3. Open the cassette cover of the recorder and insert into the body with the cabinet top removed. This particular condition permits also the inspection of the pattern side of the tuner pack PC plate.

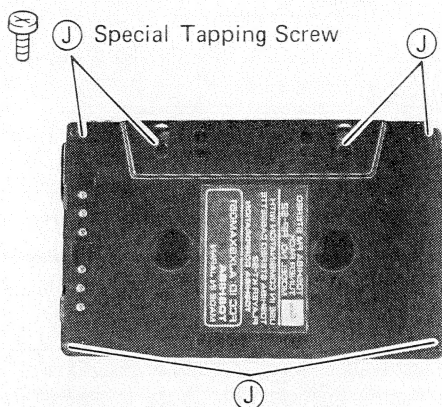


Figure 8.

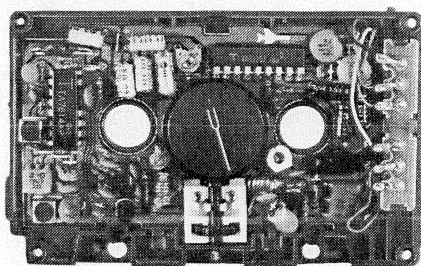


Figure 9.

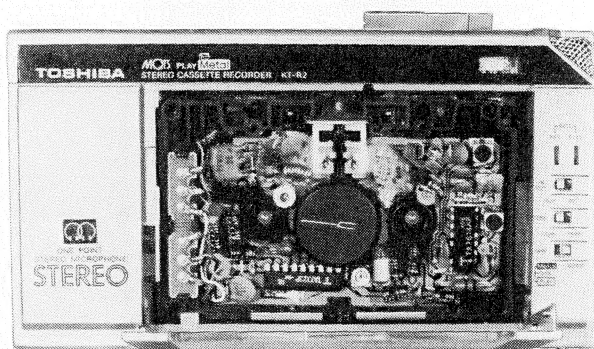


Figure 10.

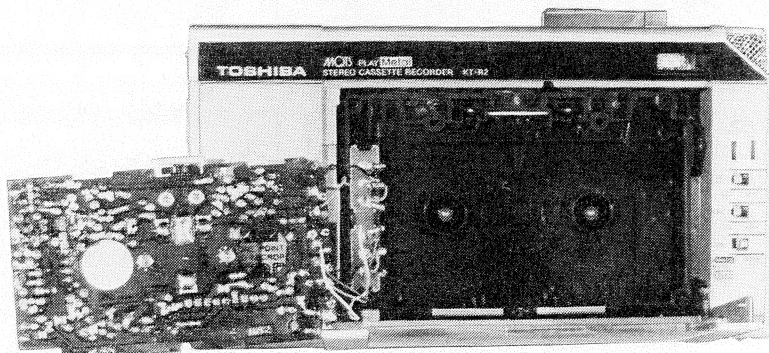


Figure 11.

3. BLOCK DIAGRAM

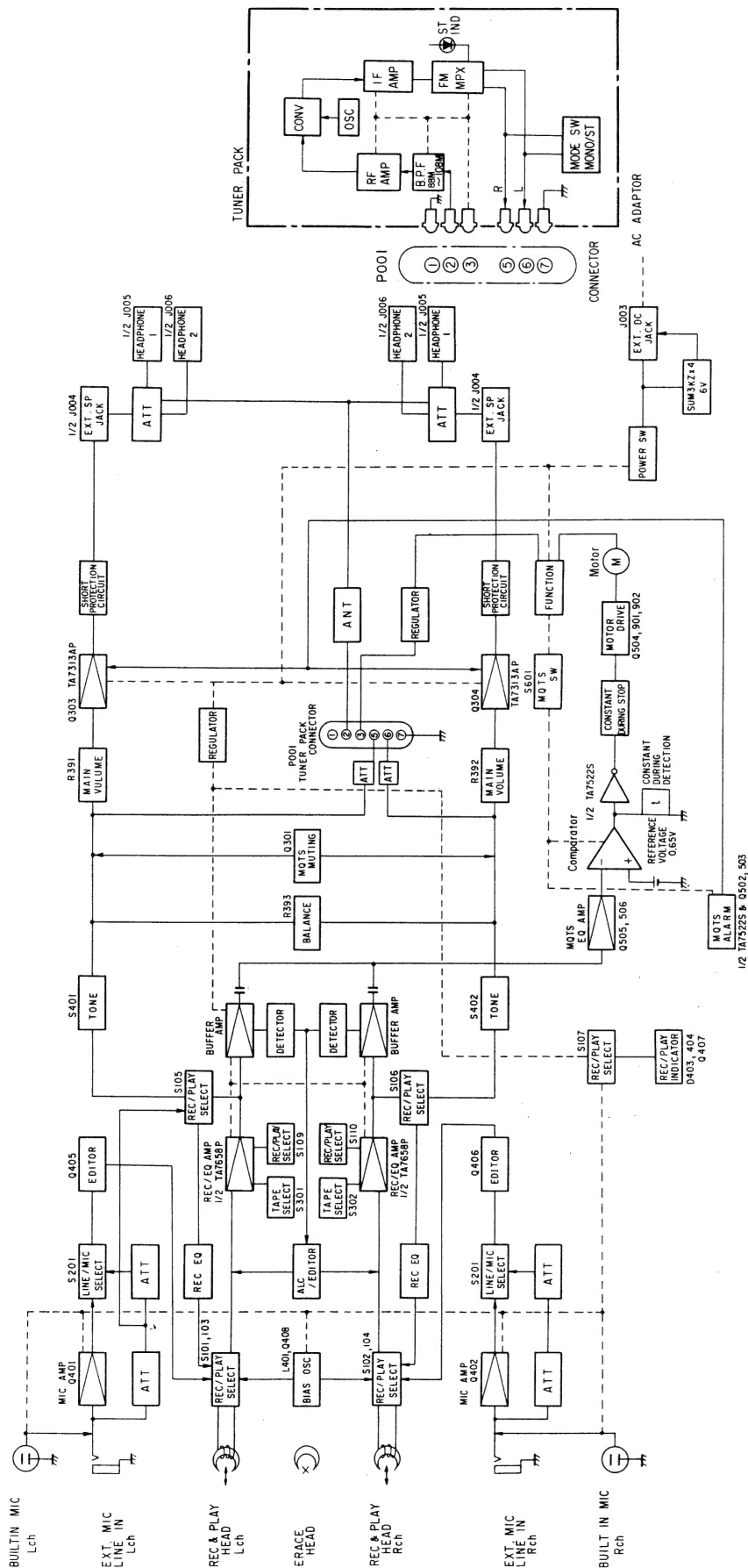


Figure 12.

4. ALIGNMENT INSTRUCTIONS

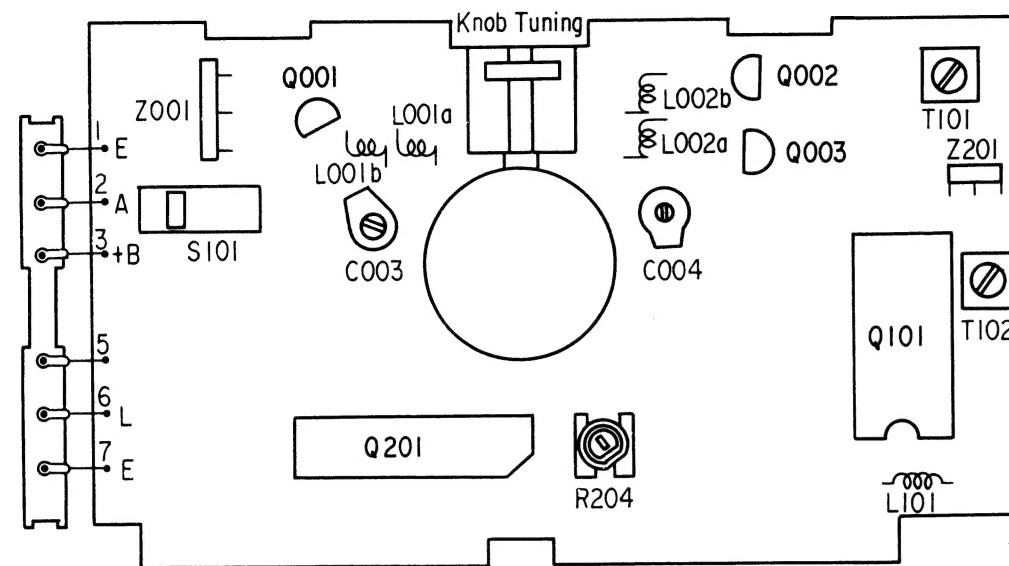


Figure 13.

FM-IF ALIGNMENT

1. Turn on both sweep generator and oscilloscope, and allow a fifteen-minute warm-up period.
2. Connect the RF SWEEP SIGNAL OUTPUT from the signal generator through the loop antenna to the receiver.
3. Connect the oscilloscope vertical input directly to the test point L or R and connect the shielded lead to the test point Earth.
4. Connect the SWEEP VOLTAGE OUTPUT of the sweep generator to the oscilloscope.
5. Proceed as outlined in the FM-IF ALIGNMENT CHART.

FM-IF ALIGNMENT CHART

Step	Signal coupling	Equip.	Tuning	Connection	Adjust. point	Pattern
1	Connect sweep generator output to a three-turn loop antenna of 10cm diameter.	Sweep generator of 10.7 MHz center freq. with 10.7 MHz marker.	Tuning Knob fully counterclockwise (Highest Frequency.)	Set scope for connecting output signal from TUN OUT to vertical axis of scope "V" and sweep generator output to horizontal axis "H".	L004 T102	Turn the coil T102 fully counterclockwise to obtain a single peak. Fig. 16 Adjust coil T101 in order until the best single peak is obtained. Finally turn the coil T102 to obtain S curve. Fig. 17

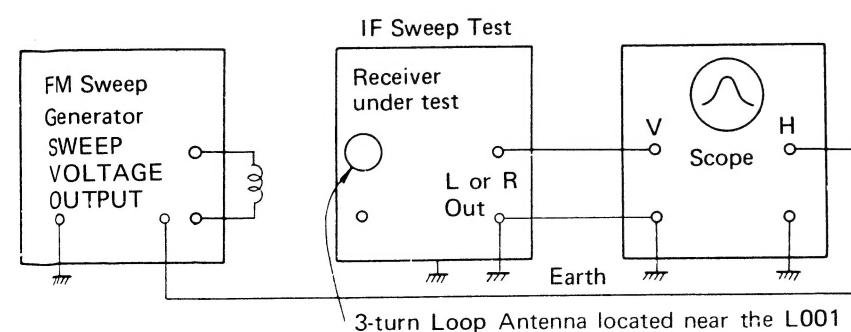


Figure 14.

Generator Coupling Hook-Up

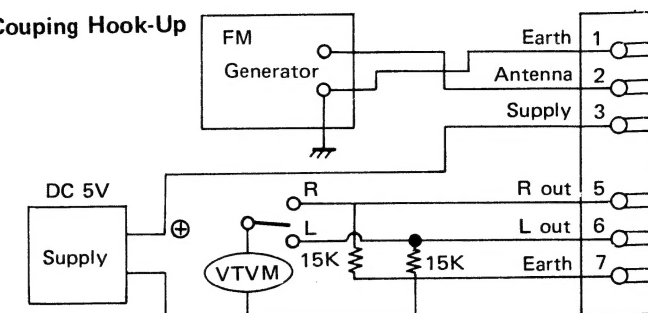


Figure 15.

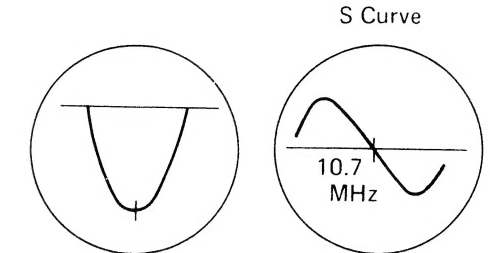


Figure 16.

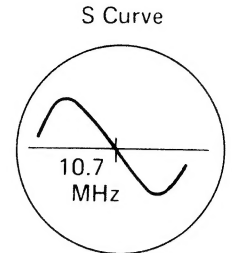


Figure 17.

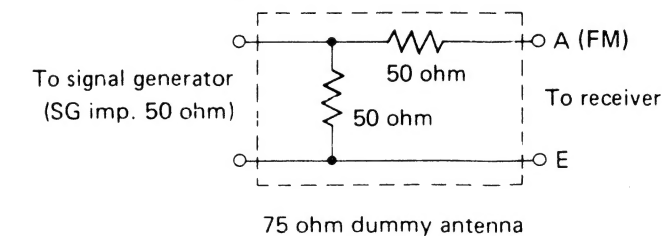
FM-RF ALIGNMENT

1. Turn on the signal generator and the VTVM, and allow a fifteen-minute warm-up period.
2. Connect the signal generator output through a 75 ohm dummy antenna across FM ANT.
3. Connect the VTVM across a 15K ohm dummy load.
4. Adjust the signal generator frequency as indicated in FM-RF ALIGNMENT CHART, and maintain a sufficient signal output level to provide a measurable indication.
5. Proceed as outlined in the FM-RF ALIGNMENT CHART.

FM-RF ALIGNMENT CHART

Step	Signal Generator	Radio Dial Setting	Adjustment	Remarks
1	87.5 MHz	Tuning Knob fully Counterclockwise (Lowest Frequency)	OCS. Coil L002	Adjust for maximum output indication
2	108 MHz	Tuning Knob fully Clockwise (Highest Frequency)	OSC. Trim. C004	Adjust for maximum output indication
3	Repeat steps 1 and 2 as required.			
4	90MHz	Tune to signal	RF Coil L001	Adjust for maximum output indication
5	106 MHz		Ant. Trim. C003	
6	Repeat steps 4 and 5 as required.			

CAUTION: When realigning the FM Receiving Frequency, the highest end of the frequency range should not be more than 108 MHz and the lowest end of the frequency range should not be less than 87.5 MHz, in order to comply with FTZ regulations in West Germany.



FREE RUN FREQUENCY ALIGNMENT

Adjust R204 under no signal condition so as to obtain 76 kHz \pm 150 Hz.

RECORD/PLAYBACK HEAD ADJUSTMENT

A 6.3 kHz standard tape must be used for this adjustment. Connect a VTVM or an oscilloscope to the EXT Speaker jack and adjust the azimuth by using a phillips screwdriver to maintain the maximum output voltage.

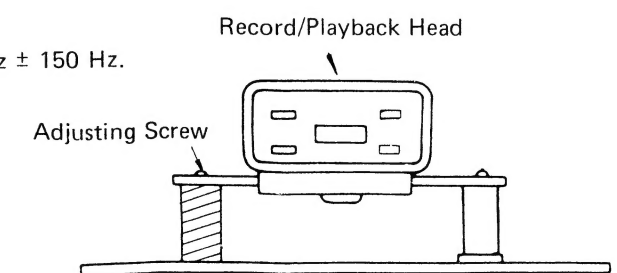
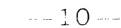


Figure 18. Record/Playback Head Adjustment

— CASSETTE RECORDER SECTION —



9



10-

— FM TUNER PACK SECTION —



KT-R2

— FM TUNER PACK SECTION —



7. MECHANISM EXPLODED VIEW

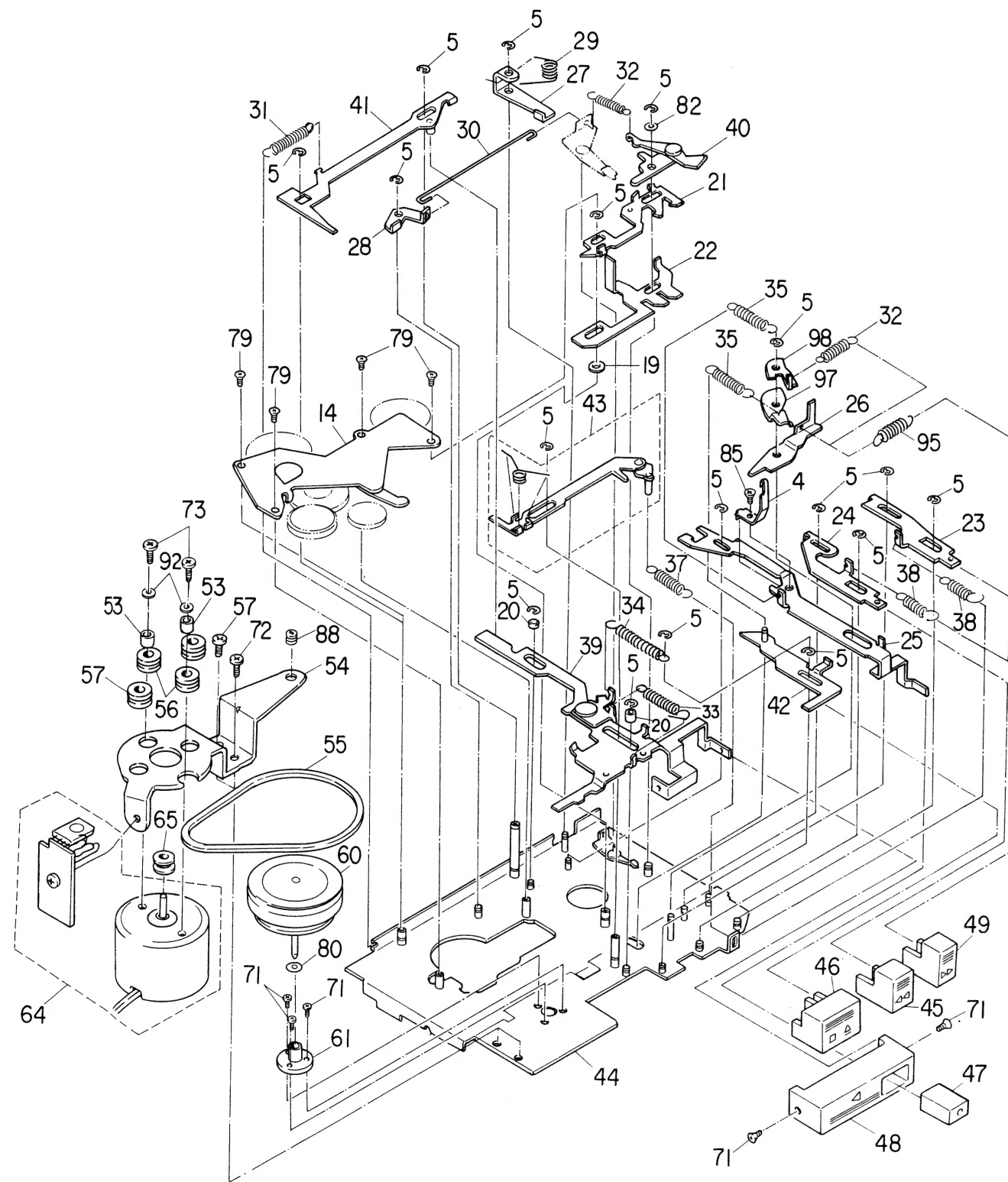


Figure 23.

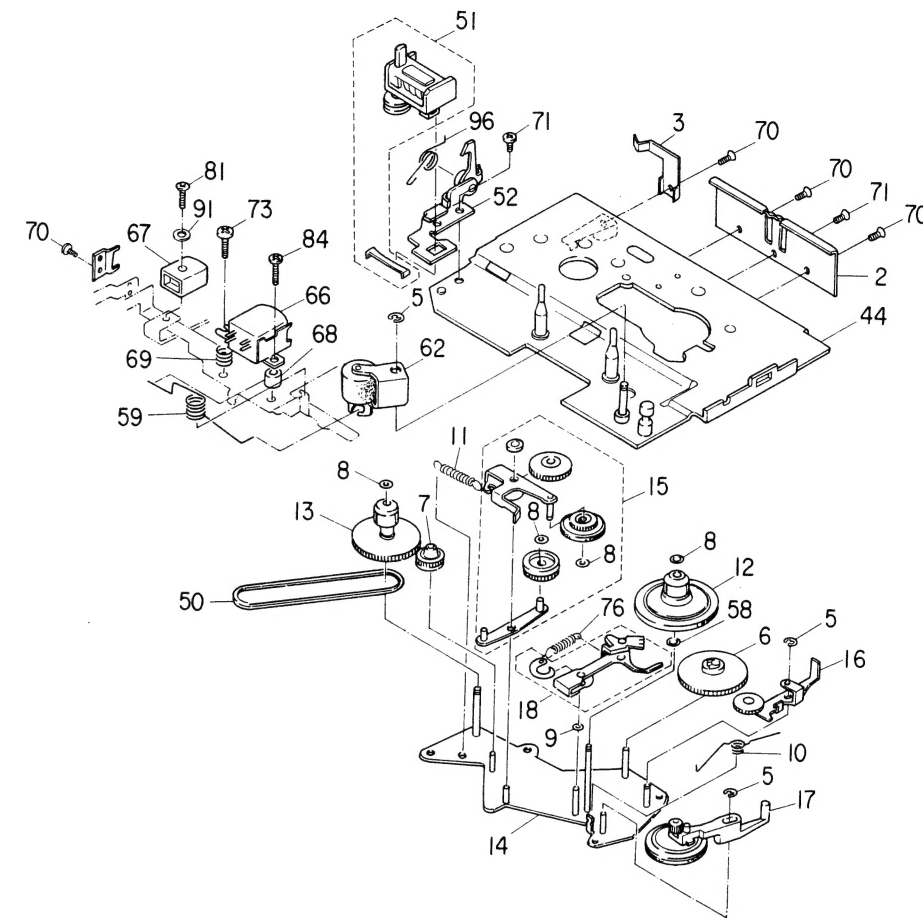


Figure 24.

8. MOTOR REPLACEMENT

1. MOTOR PULLEY REMOVAL

Put a preheated soldering iron on the upper part of the pulley to melt the metal glue between the motor pulley and the shaft of the motor and pull the motor pulley upward strongly. (See Fig. 25)

Caution: Do not scorch your fingers.

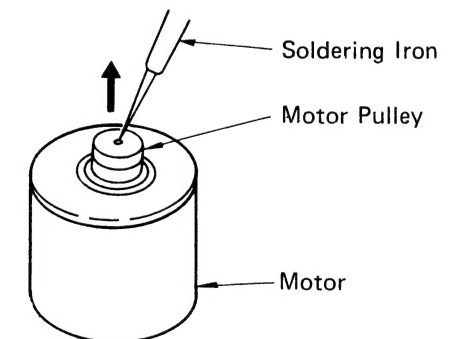


Figure 25.

2. MOTOR PULLEY INSTALLATION

- (1) Maintain a gap (1mm) between motor and motor pulley as shown in Fig. 26 and apply a little metal glue, LOCTITE 601 (22964085) from the top of the motor pulley.
- (2) Spread the glue between them by reciprocating the pulley and then fix it while keeping the adequate gap for one minute.

Caution: Do not put glue around part A in Fig. 26.

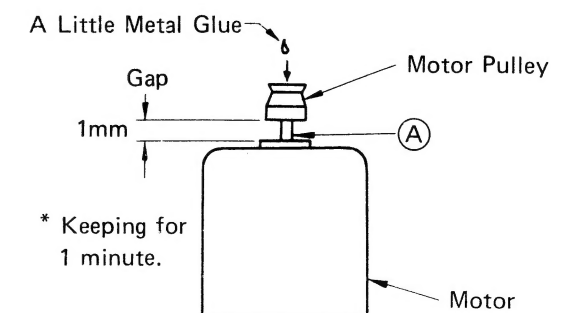


Figure 26.

9-1. CABINET EXPLODED VIEW

- CASSETTE RECORDER SECTION -

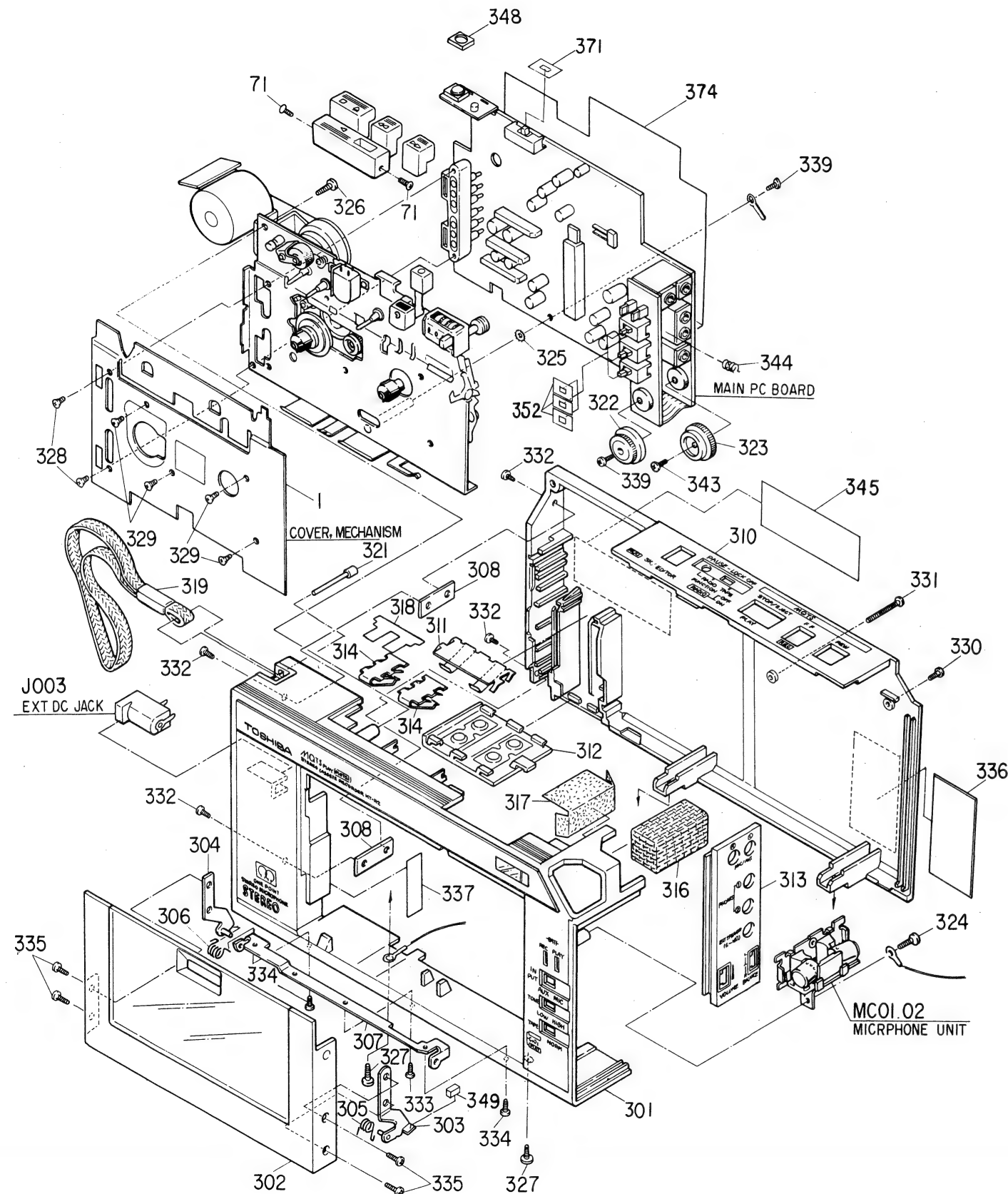


Figure 27.

10-1. PARTS LIST

- MECHANISM & CASSETTE RECORDER CABINET -

Symbol No.	Part No.	Description
MECHANISM PARTS		
1	25736968	Cover, Mechanism
2	25779051	Spring, Holder
3	25779052	Spring
4	25779213	Spring, Record
5	25735254	E Ring, 1.5φ
6	25756226	Gear, Cam
7	25756220	Gear, Rewind
8	25764361	Washer
9	25764566	Washer
10	25773464	Spring, Take-up Lever
11	25776153	Spring
12	25712394	Reel Ass'y, Take-up
13	25712373	Reel Ass'y, Supply
15	25713553	Gear Ass'y, Fast
16	25713516	Lever Ass'y, Cam Drive
17	25713557	Lever Ass'y, Take-up
18	25791386	Lever Ass'y, Detect
19	22703166	Washer
20	25726562	Roller
21	25741892	Slider, Lock
29	25773465	Spring
30	25775191	Wire, Release
31	25776145	Spring
32	25776146	Spring
33	25776147	Spring
34	25776388	Spring
35	25776149	Spring
37	25776151	Spring
38	25776152	Spring
40	25791373	Lever Ass'y Up Drive
43	25791102	Slider Ass'y, Fast
45	25782479	Button, Fast Forward
46	25782478	Button, Stop
47	25782481	Button, Record
48	25782477	Button, Playback
49	25782480	Button, Rewind
50	25755443	Belt, Counter
51	25873250	Counter
53	25726635	Spacer
55	25755521	Belt, Drive
56	25761475	Cushion, Motor A
57	25761476	Cushion, Motor B
58	25764534	Washer
59	25773501	Spring, Pressure, Lever
60	25717506	Flywheel Ass'y
61	25717441	Holder Ass'y, Capstan
62	25717465	Lever Ass'y, Pressure
64	22125799	Motor, DC, 6V
65	25758106	Pulley, Motor
66	22217380	Head, Record/Playback, HRPT-92
67	22218250	Head, Erase, HET-66
68	25726631	Spacer
69	25772504	Spring, Head
70	22707495	Screw, 1.4φ x 1.6mm, FLT
71	22707496	Screw, 1.4φ x 2.5mm, PAN, BLK
72	22701467	Screw, 2φ x 3mm, BID
73	22707505	Screw, 2φ x 6mm, BID
76	25776154	Spring

Symbol No.	Part No.	Description
79	22707544	Screw, 1.4φ x 20mm, FLT
80	25764597	Washer
81	22707715	Screw, 2φ x 8mm, PAN, BLK
82	25735239	Washer
84	22707734	Screw, 1.7φ x 6mm, PAN FL, BLK
85	22707678	Screw, 1.4φ x 1.6mm, FLT, BLK
88	25783255	Screw, Thrust Adjust
91	25735249	Washer
92	25735260	Washer
95	25776395	Spring
96	25773488	Spring, Eject
CABINET PARTS		
301	25881255	Cabinet Ass'y, Front
302	25881263	Cassette Cover Ass'y
303	25847246	Hinge Ass'y, Right
304	25847247	Hinge Ass'y, Left
305	25847242	Spring, Hinge Right
306	25847243	Spring, Hinge Left
307	25847239	Bracket, Hinge
308	25846544	Bracket, Hold
310	25881256	Cabinet Ass'y, Back
311	25779203	Spring, Battery B
312	25881183	Battery Cover Ass'y
313	25881184	Panel Ass'y, Side
314	25779204	Spring, Battery C
316	25828997	Net, Mic
317	25833506	Net, Dust
318	25854459	Blind, Battery
319	22993042	Strap-W
320	25726628	Cap
321	25846545	Strap Shaft
322	25837633	Knob, Variable Volume
323	25837634	Knob, Balance Volume
324	22701245	Screw, 2φ x 6mm, BID, Tapping
325	22703319	Washer
326	22707525	Screw, 2.6φ x 8mm, BID, Tapping, RED
327	22707595	Screw, 2φ x 8mm, BID, Chrome
328	22707659	Screw, 1.4φ x 3.5mm, FLT, BLK
329	22707678	Screw, 1.4φ x 1.6mm, FLT, BLK
330	22707697	Screw, 1.4φ x 4mm, PAN FL, Chrome
331	22707733	Screw, 1.7φ x 11mm, PAN FL, Chrome
332	22707738	Screw, 1.4φ x 3mm, PAN FL, Chrome
333	22707736	Screw, 1.7φ x 5mm, PAN, Chrome
334	22707737	Screw, 1.7φ x 6mm, PAN, Chrome
335	22707739	Screw, 1.7φ x 2mm, FLT, Chrome
336	22900139	Label, Caution, SP, E
337	22900142	Label, Caution, C, R2E
339	22707612	Screw, 1.4φ x 3mm, PAN, BLK
340	22900107	Label, Caution
343	22707670	Screw, 1.7φ x 4mm, PAN, BLK
344	25777085	Spring, Earth
345	25808072	Nameplate, R2E
349	25857023	Cushion

10-2. PARTS LIST — CASSETTE RECORDER —

Symbol No.	Part No.	Description
TRANSISTORS, ICS AND DIODES		
Q301, 302		Transistor, 2SC1815-GR
Q303, 304		IC, TA7313AP
Q401, 402		Transistor, 2SC2458L-GR
Q403, 404		Transistor, 2SC2458-GR
Q405, 406		Transistor, 2SC1815-GR
Q407, 408		Transistor, 2SC1815-GR
Q409		IC, TA7658P
Q501		IC, TA7522S
Q502		Transistor, 2SC2458-GR
Q503		Transistor, 2SC2458-GR
Q504		Transistor, 2SC1815-GR
Q505, 506		Transistor, 2SC2458-GR
Q901		Transistor, 2SA1048-GR
Q902		Transistor, 2SC1959-Y
Q903, 904		Transistor, 2SC2458-GR
Q905		Transistor, 2SC2458-GR
D401, 402		Diode, 1S1555V
D403		Diode, TLG205, LED, GRN
D404		Diode, TLR205, LED, RED
D405, 406		Diode, 1S1555V
D407, 408		Diode, 1S1555V
D409		Diode, 1S1555V
D410		Diode, 02Z5.6A
D501		Diode, 1S1555V
D503, 504		Diode, 1S1555V
D505, 506		Diode, 1S1555V
D901		Diode, 02Z5.6A
D902		Diode, TLR102, LED, RED
ELECTRICAL PARTS		
J001 ~ 002	22163881	Jack, EXT MIC/LINE IN
J003	22163721	Jack, DC Power (DC-6V)
J004	22163877	Jack, External Speaker
J005 ~ 006	22163876	Jack, 3.5 ϕ , Stereo Headphone
L301 ~ 303	22292136	Coil, RT-51-2136
L304	22294361	Coil, RF, FM
L401	22235198	Coil
MC01 ~ 02	22881188	Microphone Unit
S101 ~ 110	22195838	Switch, Slide, Record/Playback
S201 ~ 202	22195837	Switch, Slide, MIC/AUX
S301 ~ 302	22195837	Switch, Slide, Metal/Normal/CrO2
S401 ~ 402	22195837	Switch, Slide, High/Low
S501	22195692	Switch, Slide, Tape/Radio
S601	22195874	Switch, Leaf, MQTS
S701	22195623	Switch, Key, EDITOR/MQTS/SK
S801	22195432	Switch, Leaf, Main

Symbol No.	Part No.	Description
CAPACITORS		
D = $\pm 0.5\text{pF}$, J = $\pm 5\%$, K = $\pm 10\%$, M = $\pm 20\%$		
ABBREVIATIONS: CD = Ceramic Disk, EL = Electrolytic, BL = Barrier Layer, PS = Poly Styrene		
C301, 302	22440272	EL, 1mfd, 50V
C303, 304	22360366	CD, 1000pF, 50V, K
C305, 306	22360365	CD, 100pF, 50V, K
C307, 308	22360346	BL, 0.047mfd, 25V, M
C309, 310	22440279	EL, 47mfd, 6.3V
C311, 312	22360344	BL, 0.01mfd, 25V, M
C313, 314	22440405	EL, 220mfd, 6.3V
C315	22440467	EL, 470mfd, 6.3V
C316	22440462	BL, 100mfd, 10V, M
C317	22362180	CD, 18pF, 50V, K
C318	22360371	CD, 4pF, 50V, D
C319, 320	22360362	CD, 470pF, 50V, K
C321, 322	22440279	EL, 47mfd, 6.3V
C323	22440467	EL, 470mfd, 6.3V
C324	22360365	CD, 100pF, 50V, K
C401, 402	22360645	BL, 0.068mfd, 12.5V, M
C403, 404	22360345	CD, 0.022mfd, 25V, M
C405, 406	22440271	EL, 0.47mfd, 50V
C407, 408	22360346	BL, 0.047mfd, 25V, M
C409, 410	22440272	EL, 1mfd, 50V
C411, 412	22360366	CD, 1000pF, 50V, K
C413, 414	22360362	CD, 470pF, 50V, K
C415, 416	22440444	EL, 10mfd, 16V
C417, 418	22360365	CD, 100pF, 50V, K
C419, 420	22360616	BL, 0.01mfd, 25V, K
C421, 422	22440272	EL, 1mfd, 50V
C423, 424	22440272	EL, 1mfd, 50V
C425	22440399	EL, 100mfd, 6.3V
C426	22360344	BL, 0.01mfd, 25V, M
C427	22440279	EL, 47mfd, 6.3V
C428	22360365	CD, 100pF, 50V, K
C429, 430	22360344	BL, 0.01mfd, 25V, M
C431, 432	22360627	CD, 3900pF, 25V, K
C433	22360344	BL, 0.01mfd, 25V, M
C434	22440399	EL, 100mfd, 6.3V
C435	22440277	EL, 22mfd, 6.3V
C436	22371102	PS, 1000pF, 50V
C437	22440399	EL, 100mfd, 6.3V
C438	22360346	BL, 0.047mfd, 25V, M
C439, 440	22360344	BL, 0.01mfd, 25V, M
C441, 442	22360367	CD, 2200pF, 50V, K
C443	22440277	EL, 22mfd, 6.3V
C444	22440444	EL, 10mfd, 16V
C445, 446	22360365	CD, 100pF, 50V, K
C447	22360344	BL, 0.01mfd, 25V, M
C501	22360344	BL, 0.01mfd, 25V, M
C502	22440277	EL, 22mfd, 6.3V
C503	22440444	EL, 10mfd, 16V

Symbol No.	Part No.	Description
C504	22440271	EL, 0.47mfd, 50V
C505	22360344	BL, 0.01mfd, 25V, M
C506	22360574	BL, 6800pF, 25V, K
C508	22440405	EL, 220mfd, 6.3V
C509	22360365	CD, 100pF, 50V, K
C510	22440277	EL, 22mfd, 6.3V
C910	22440404	EL, 220mfd, 10V
C902	22440405	EL, 220mfd, 6.3V
C905, 906	22360344	BL, 0.01mfd, 25V, M
C907	22360344	BL, 0.01mfd, 25V, M
C908	22440467	EL, 470mfd, 6.3V
C909	22440462	EL, 100mfd, 10V
C910	22440277	EL, 22mfd, 6.3V
RESISTORS		
All resistors are carbon film 1/8W, $\pm 5\%$ unless otherwise noted. K = 1000, M = 1000000		
R301	22550189	4.7K ohm
R302	22550185	2.2K ohm
R303, 304	22550167	68 ohm
R305, 306	22550195	18K ohm
R307, 308	22550223	2.2 ohm
R309, 310	22550161	22 ohm
R391, 392	22614402	20K ohm, A, Variable Volume
R393	22615402	20K ohm, B, Semi Variable Volume
R401, 402	22550182	1.2K ohm
R403, 404	22550189	4.7K ohm
R405, 406	22550194	15K ohm
R407, 408	22550193	12K ohm
R409, 410	22550183	1.5K ohm
R411, 412	22550194	15K ohm
R413, 414	22550204	100K ohm
R415, 416	22550181	1K ohm
R417, 418	22550200	47K ohm
R419, 420	22550200	47K ohm
R421, 422	22550190	5.6K ohm
R423, 424	22550191	6.8K ohm
R425, 426	22550192	10K ohm
R427, 428	22550196	22K ohm
R429, 430	22550213	470K ohm
R431, 432	22550174	270 ohm
R433, 434	22550407	12K ohm
R435, 436	22550408	18K ohm
R437, 438	22550211	330K ohm
R439, 440	22550207	180K ohm
R441, 442	22550190	5.6K ohm
R443, 444	22550169	100 ohm
R445	22550194	15K ohm
R446	22550181	1K ohm
R449, 450	22550217	1M ohm
R451, 452	22550193	12K ohm

Symbol No.	Part No.	Description
R453	22550171	150 ohm
R454	22550177	470 ohm
R455	22550174	270 ohm
R456	22550165	47 ohm
R457	22550195	18K ohm
R458	22550160	18 ohm
R459, 460	22550192	10K ohm
R461	22550181	1K ohm
R462	22550191	6.8K ohm
R463	22550185	2.2K ohm
R467, 468	22550197	27K ohm
R469	22550217	1M ohm
R470	22550219	1.5M ohm
R471	22550175	330 ohm
R501	22550189	4.7K ohm
R502	22550201	56K ohm
R503	22550204	100K ohm
R504	22550187	3.3K ohm
R505	22550200	47K ohm
R506, 507	22550204	100K ohm
R508, 509	22550204	100K ohm
R510	22550189	4.7K ohm
R511	22550192	10K ohm
R512	22550189	4.7K ohm
R513	22550192	10K ohm
R514	22550204	100K ohm
R515	22550181	1K ohm
R516	22550190	5.6K ohm
R517	22550205	120K ohm
R518	22550185	2.2K ohm
R519	22550193	12K ohm
R520	22550169	100 ohm
R521	22550189	4.7K ohm
R522	22550181	1K ohm
R523	22550189	4.7K ohm
R524	22550175	330 ohm
R525	22550181	1K ohm
R526	22550204	100K ohm
R527	22550198	33K ohm
R901, 902	22550194	15K ohm
R903	22550183	1.5K ohm
R905	22550184	1.8K ohm
R906	22550204	100K ohm
R907	22540513	1.8K ohm
R909	22550177	470 ohm
R910, 911	22550198	33K ohm

9-2. CABINET EXPLODED VIEW

- FM TUNER PACK SECTION -

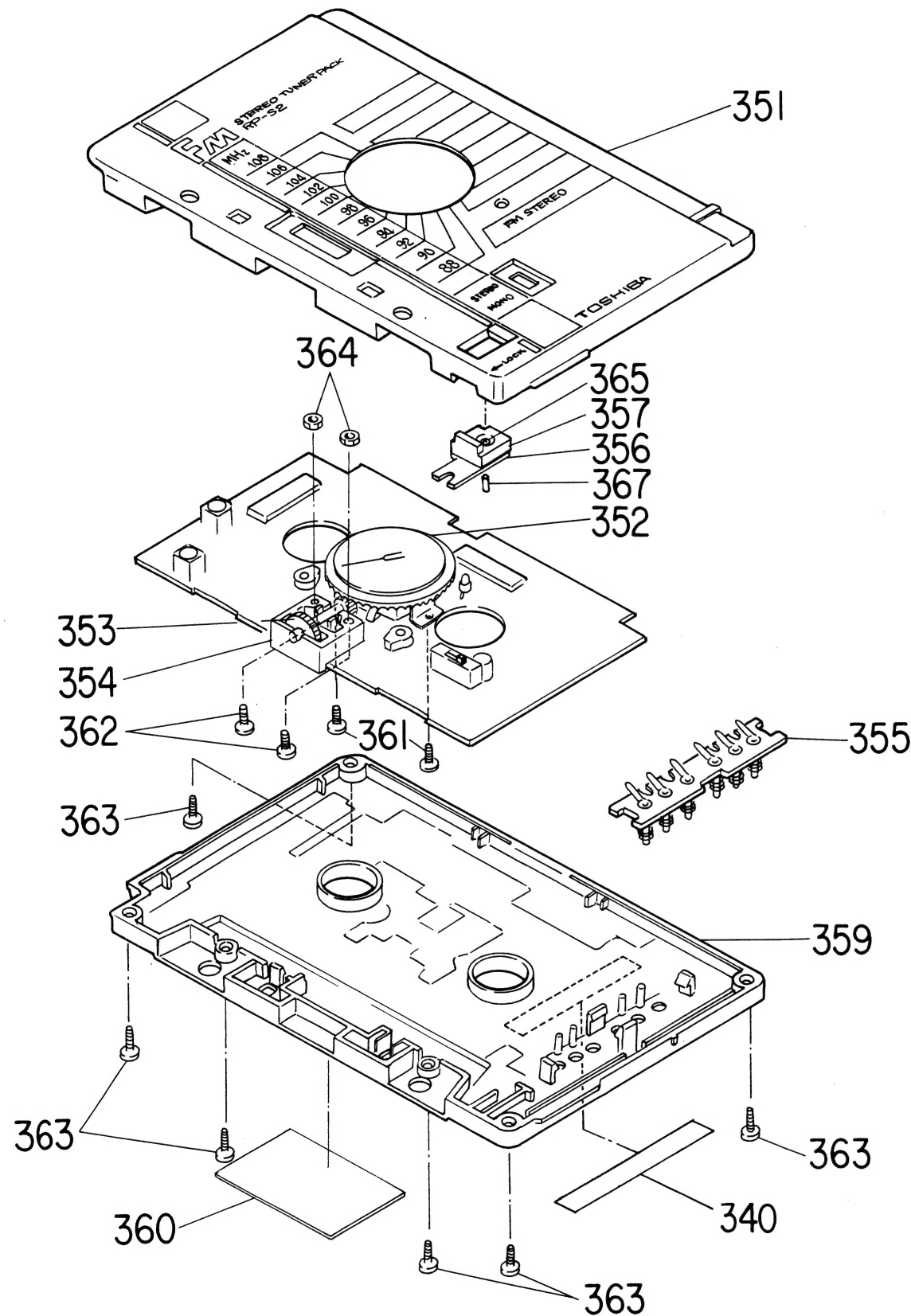


Figure 28.

10-3. PARTS LIST

- FM TUNER PACK -

Symbol No.	Part No.	Description
CABINET PARTS		
351	22881067	Cabinet, Upper
352	22847374	Plate, Dial
353	22824362	Knob, Tuning
355	22161681	Connector, 6P
356	22713103	Plate, Lock
357	22884082	Knob, Lock
359	22881054	Cabinet, Bottom
360	22866177	Name Label (TA/TC)
360	22866178	Name Label, (YY/AY/EY/MY)
361	22701314	Screw, 2φ x 3mm, BID
362	22707555	Screw, 1.7φ x 3.5mm, Special
363	22707662	Screw, Special, Tapping
364	22702180	Nut, Special
365	22707614	Screw, 1.4φ x 4mm, Special, BLK
367	22758293	Cushion, Tube
TRANSISTORS, ICS AND DIODES		
Q001, 002, 003		Transistor, 2SC1923-O, R
Q101		IC, TA7614AP-W-W/Y
Q201		IC, TA7323P-BN, R, O, Y, GR
D001		Diode, 1S1555V
D002		Diode, 1S2236
D201		Diode, TLR123, LED, RED
ELECTRICAL PARTS		
L001a	22294416	Coil, FM, LH8403R
L001b	22294414	Coil, FM, LH8402R
L002a	22294415	Coil, FM, Oscillator
L002b	22294413	Coil, FM, Oscillator
L101, 201	22241013	Coil, 10μH
T101	22265811	IF Transformer, FM, IT5811
T102	22267390	IF Transformer, FM, IT7390
S101	22195556	Switch, Slide, Stereo/Mono
Z001	22153121	Filter, FM, 10.7 MHz, Band-Pass
Z201	22153067	Filter, Ceramic, FM, 10.7 MHz (AY/YY/EY/MY)
Z201	22153122	Filter, Ceramic, FM, 10.7 MHz (TA/TC)
CAPACITORS		
D = ±0.5pF, K = ±10%, M = ±20%		
ABBREVIATIONS: CD = Ceramic Disk, EL = Electrolytic		
BL = Barrier Layer, PS = Polystyrene		
C001, 002	22308206	Pory Variable Capacitor
C003	22309175	Trimmer
C004	22309159	Trimmer

Note: The FM TUNER PACK for "RY" is optional.

Symbol No.	Part No.	Description
C005	22360563	CD, 18pF, 50V, D
C006	22360366	CD, 1000pF, 50V, K
C007	22360372	CD, 6pF, 50V, D
C008	22360366	CD, 1000pF, 50V, K
C009	22360329	BL, 0.022mfd, 31.5V, M
C010	22360372	CD, 6pF, 50V, D
C011	22360327	BL, 0.01mfd, 25V, M
C012	22360592	CD, 24pF, 50V, D
C013	22360368	CD, 6pF, 50V, D
C014	22360346	BL, 0.047mfd, 12.5V, M
C015	22360329	BL, 0.022mfd, 31.5V, M
C101, 102, 103	22360327	BL, 0.01mfd, 25V, M
C104	22360346	BL, 0.047mfd, 12.5V, M
C105	22360365	CD, 100pF, 50V, K
C201	22440276	EL, 10mfd, 16V
C202	22440320	EL, 0.22mfd, 50V
C203	22440271	EL, 0.47mfd, 50V
C204	22380070	PS, 1000pF, 125V, D
C205	22440272	EL, 1mfd, 50V
C206, 207	22360330	BL, 0.033mfd, 25V, M
C208, 209	22440272	EL, 1mfd, 50V
C210	22440277	EL, 22mfd, 6.3V
RESISTORS		
All resistors are carbon film 1/8W, ±5%. K = 1000		
R001	22540518	4.7K ohm
R002	22540497	82 ohm
R003	22540522	10K ohm
R004	22540525	18K ohm
R005	22540523	12K ohm
R006	22540530	47K ohm
R007	22540538	220K ohm
R101	22540508	680 ohm
R102	22540494	47 ohm
R103	22550172	180 ohm
R104	22540180	150 ohm
R105	22540218	220K ohm
R106	22540523	12K ohm
R202	22540510	1K ohm
R203	22540522	10K ohm
R204	22658593	4.7K ohm, Semi-fixed Variable
R205	22540504	330 ohm
R206	22540533	82K ohm, (TA7323P-GR)
R206	22540535	120K ohm, (TA7323P-Y)
R206	22540538	220K ohm, (TA7323P-O)
R005	22540543	560K ohm, (TA7323P-R)
R207, 208	22540516	3.3K ohm

11-1. HEADPHONE EXPLODED VIEW

- TA, TC, AY -

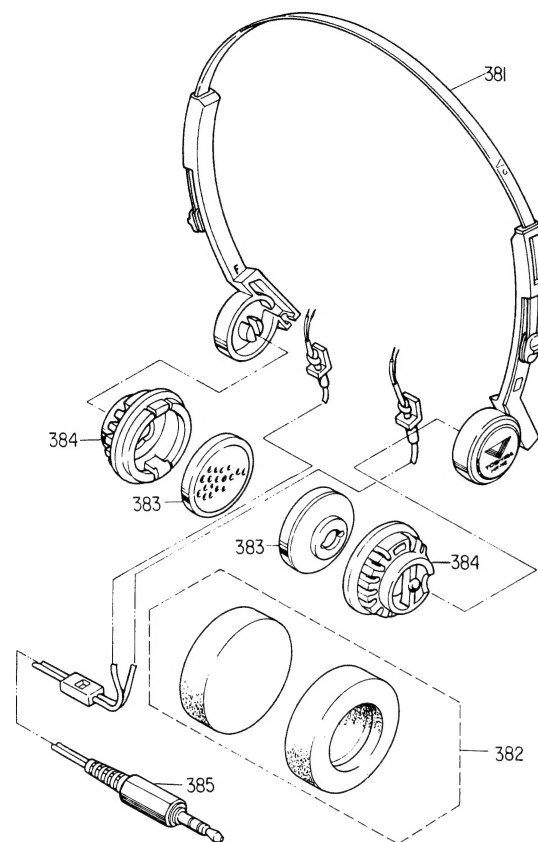


Figure 29.

■ CARE FOR UNIT ASSEMBLY AND REPLACEMENT OF CORD WITH PLUG

1. Insert tweezers into dent of unit case and detach the assembly from the case with tweezers lifting up.

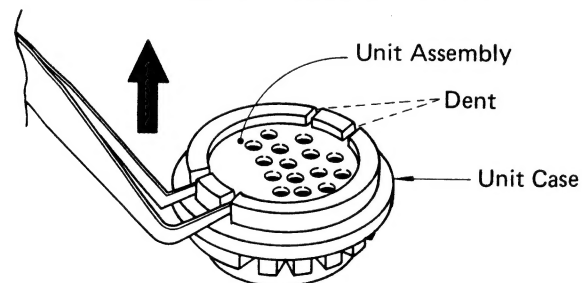


Figure 30.

2. Unsolder the back of assembly to remove the cord with plug.

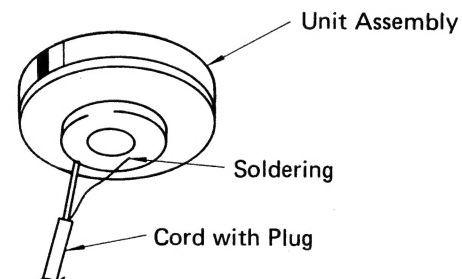


Figure 31.

11-2. HEADPHONE PARTS LIST

Symbol No.	Part No.	Description
381	22810066	Head Band Ass'y, (TA/TC/AY)
382	22810067	Ear Pad Set, (TA/TC/AY)
383	22810068	Unit Ass'y, (TA/TC/AY)

Symbol No.	Part No.	Description
384	22810069	Unit Case, (TA/TC/AY)
385	22810070	Cord Ass'y with Plug, (TA/TC/AY)

11-3. HEADPHONE EXPLODED VIEW

- YY, EY, RY, MY -

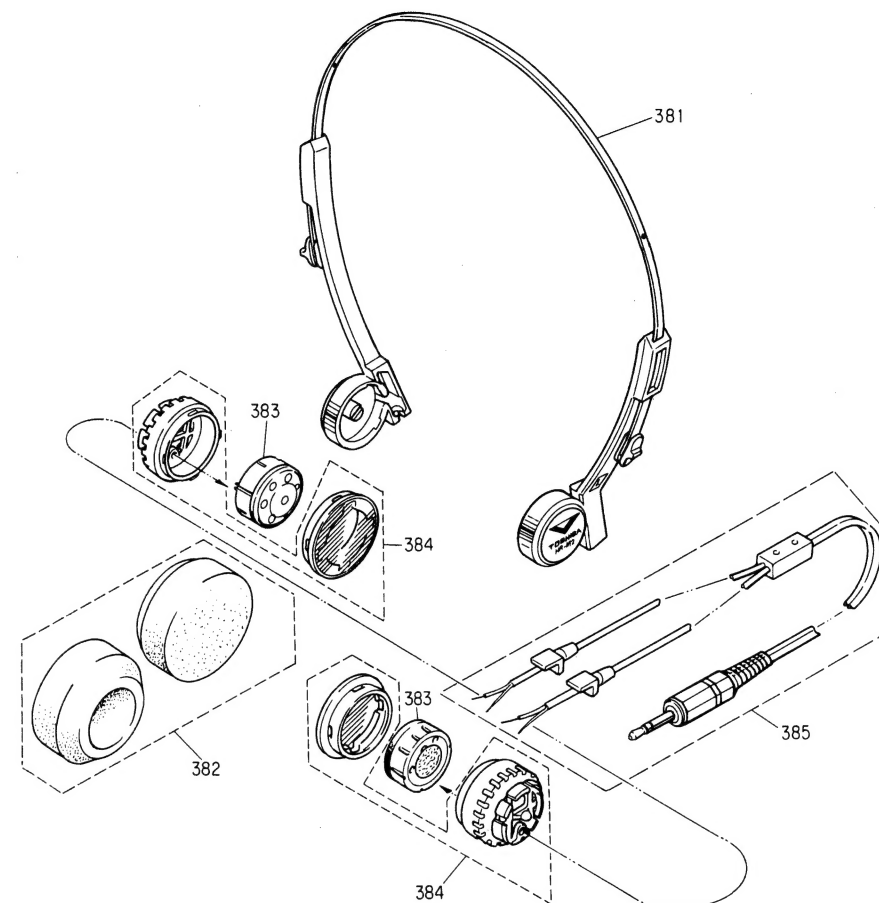


Figure 32.

■ CARE FOR UNIT ASSEMBLY AND REPLACEMENT OF CORD WITH PLUG

As for assembly of headphone case, case A (net side) is combined with case B (frame side) by the claw of case B.

- (1) Insert the screwdriver (-) into the hole of case (A) and push down the tip of screwdriver in the direction of arrow by the principle of lever to make a groove between case A and case B.
- (2) Insert a slender screwdriver into the groove (B) and unhook the claw with the case A raising up in the direction of arrow (C).

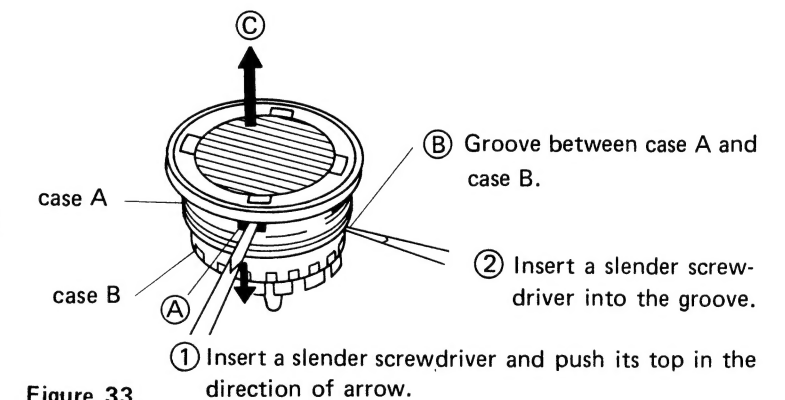


Figure 33.

Note: When disassembling the case with a screwdriver, take enough care not to damage the case or unit assembly in the case.

11-4. HEADPHONE PARTS LIST

Symbol No.	Part No.	Description
381	22810061	Head Band Ass'y, (YY/EY/RY/MY)
382	22810062	Ear Pad Set, (YY/EY/RY/MY)
383	22810063	Unit Ass'y, (YY/EY/RY/MY)

Symbol No.	Part No.	Description
384	22810064	Case Set, (YY/EY/RY/MY)
385	22810065	Cord Ass'y with Plug, (YY/EY/RY/MY)

10-4. PARTS LIST**— ACCESSORIES —**

Symbol No.	Part No.	Description
ACCESSORIES		
AC01	22105368	Demonstration Tape
AC02	22903134	Owner's Manual, (TA)
AC02	22903135	Owner's Manual, (TC)
AC02	22903136	Owner's Manual, (EY/YY/MY)

Symbol No.	Part No.	Description
AC02	22903137	Owner's Manual, (AY)
AC02	22903138	Owner's Manual, (RY)
AC03	22991085	Case, Carrying
AC04	22991086	Belt, Strap
AC05	22906288	Caution Label